

## General

### Title

Pulmonary resection: percentage of patients undergoing pulmonary resection who had treatment implemented with documented reassessment of pain score within 2 hours.

### Source(s)

Cassivi SD, Allen MS, Vanderwaerd GD, Ewoldt LL, Cordes ME, Wigle DA, Nichols FC, Pairolero PC, Deschamps C. Patient-centered quality indicators for pulmonary resection. *Ann Thorac Surg*. 2008 Sep;86(3):927-32. [40 references] [PubMed](#)

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of patients undergoing pulmonary resection who had treatment implemented with documented reassessment of pain score within 2 hours.

### Rationale

More than 30,000 patients undergo pulmonary resection (not including diagnostic lung biopsies) each year in the United States (Memtsoudis et al., 2006). Despite this large number of surgical procedures, there remain to date no standard criteria to measure the quality of care received by patients undergoing pulmonary resection. The general thoracic surgical team developed an a priori set of patient-centered quality of care measures, specific to patients undergoing pulmonary resection.

Adequate pain control remains by far a key component of patients' perception of a successful procedure (Idvall et al., 2002). Frequent assessment of pain with timely treatment and reassessment of pain scores

have been identified as process indicators of quality of care in the postoperative period (Idvall, Hamrin, & Unosson, 2002; Meissner, Ullrich, & Zwacka, 2006). Similarly, in a recent Dutch study of quality of lung cancer care, adequate pain control for both operative and nonoperative cases was a proposed measure (Hermens et al., 2006).

## Evidence for Rationale

Cassivi SD, Allen MS, Vanderwaerdt GD, Ewoldt LL, Cordes ME, Wigle DA, Nichols FC, Pairolero PC, Deschamps C. Patient-centered quality indicators for pulmonary resection. *Ann Thorac Surg*. 2008 Sep;86(3):927-32. [40 references] [PubMed](#)

Hermens RP, Ouwens MM, Vonk-Okhuijsen SY, van der Wel Y, Tjan-Heijnen VC, van den Broek LD, Ho VK, Janssen-Heijnen ML, Groen HJ, Grol RP, Wollersheim HC. Development of quality indicators for diagnosis and treatment of patients with non-small cell lung cancer: a first step toward implementing a multidisciplinary, evidence-based guideline. *Lung Cancer*. 2006 Oct;54(1):117-24.

Idvall E, Hamrin E, Sjostrom B, Unosson M. Patient and nurse assessment of quality of care in postoperative pain management. *Qual Saf Health Care*. 2002 Dec;11(4):327-34. [PubMed](#)

Idvall E, Hamrin E, Unosson M. Development of an instrument to measure strategic and clinical quality indicators in postoperative pain management. *J Adv Nurs*. 2002 Mar;37(6):532-40. [PubMed](#)

Meissner W, Ullrich K, Zwacka S. Benchmarking as a tool of continuous quality improvement in postoperative pain management. *Eur J Anaesthesiol*. 2006 Feb;23(2):142-8. [PubMed](#)

Memtsoudis SG, Besculides MC, Zellos L, Patil N, Rogers SO. Trends in lung surgery: United States 1988 to 2002. *Chest*. 2006 Nov;130(5):1462-70. [PubMed](#)

## Primary Health Components

Pulmonary resection; pain treatment; reassessment of pain score

## Denominator Description

All patients undergoing pulmonary resection (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Treatment implemented with documented reassessment of pain score within 2 hours

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

Unspecified

## Extent of Measure Testing

Unspecified

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Hospital Inpatient

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

### Statement of Acceptable Minimum Sample Size

Unspecified

### Target Population Age

All ages

### Target Population Gender

Either male or female

## National Strategy for Quality Improvement in Health

# Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Person- and Family-centered Care

Prevention and Treatment of Leading Causes of Mortality

## Institute of Medicine (IOM) National Health Care Quality Report Categories

### IOM Care Need

Living with Illness

### IOM Domain

Effectiveness

Patient-centeredness

Timeliness

## Data Collection for the Measure

### Case Finding Period

January through December

### Denominator Sampling Frame

Patients associated with provider

### Denominator (Index) Event or Characteristic

Diagnostic Evaluation

Therapeutic Intervention

### Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

### Inclusions

All patients undergoing pulmonary resection

This includes all patients undergoing pneumonectomy, lobectomy, segmentectomy, sleeve resection, and wedge resection, as well as thoracoscopic or open lung biopsy.

### Exclusions

Unspecified

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

Treatment implemented with documented reassessment of pain score within 2 hours

### Exclusions

Unspecified

## Numerator Search Strategy

Institutionalization

## Data Source

Electronic health/medical record

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

## Identifying Information

### Original Title

Pain treatment and reassessment.

### Measure Collection Name

Patient-Centered Quality Indicators for Pulmonary Resection

### Submitter

Division of General Thoracic Surgery, Mayo Clinic - Nonprofit Research Organization

### Developer

Division of General Thoracic Surgery, Mayo Clinic - Nonprofit Research Organization

### Funding Source(s)

Unspecified

### Composition of the Group that Developed the Measure

Stephen D. Cassivi, MD, MS; Mark S. Allen, MD; Gregg D. Vanderwaerdt, MPA; Lori L. Ewoldt, RN; Mary E. Cordes, RN; Dennis A. Wigle, MD, PhD; Francis C. Nichols, MD; Peter C. Pairolero, MD; Claude Deschamps, MD

### Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

### Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2008 Apr

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

## Measure Availability

Source available from the [Annals of Thoracic Surgery Web site](#) .

For more information, contact Dr. Stephen Cassivi at the Mayo Clinic, 200 First St. SW, Rochester, MN, 55905; E-mail: [cassivi.stephen@mayo.edu](mailto:cassivi.stephen@mayo.edu).

## NQMC Status

This NQMC summary was completed by ECRI Institute on January 10, 2017. The information was not verified by the measure developer.

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## Production

### Source(s)

Cassivi SD, Allen MS, Vanderwaerdt GD, Ewoldt LL, Cordes ME, Wigle DA, Nichols FC, Pairolero PC, Deschamps C. Patient-centered quality indicators for pulmonary resection. Ann Thorac Surg. 2008 Sep;86(3):927-32. [40 references] [PubMed](#)

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